

IN THE CLAIMS

Sub D1
5. (Amended) An apparatus comprising:

a processor for generating coordinate data specifying a desired primitive;

a pixel generator for generating pixel data of the desired primitive;

a control circuit for specifying a shape of an optimal pixel pattern according to the

C1
5 coordinate data generated by the processor;

an accessing unit for accessing a memory and storing the pixel data generated by the pixel generator into the memory according to the optimal pixel pattern; and

said control circuit specifying the shape of the optimal pixel pattern such that the accessing unit stores the pixel data into the memory with the minimum number of times

10 of accessing the memory, under the condition that the optimal pixel pattern in a first access of the memory is commonly used in a subsequent access of the memory.

Sub D3
24. (Amended) An apparatus according to claim 5, wherein the control circuit

detects at least one pixel pattern through which the accessing unit is allowed to access the

5 memory and store the pixel data of the desired primitive, and for outputting pixel pattern information indicating the detected at least one pixel pattern; and

C2
said accessing unit accesses the memory according to the pixel pattern information and stores the pixel data generated by the pixel generator into the memory in units of pixel data corresponding to the coordinate data.

25. (Amended) A method used in an apparatus which comprises a memory for storing pixel data, the method comprising the steps of:

generating coordinate data specifying a desired primitive;

generating pixel data of the desired primitive;

specifying a shape of an optimal pixel pattern according to the coordinate data generated by the processor;

accessing a memory and storing the pixel data generated by the pixel generator into the memory according to an optimal pixel pattern;

said step of specifying a shape of comprises specifying the shape such that the accessing unit stores the pixel data into the memory with the minimum number of times of accessing the memory, under the condition that the shape of the optimal pixel pattern in a first access of the memory is commonly used in a subsequent access of the memory.

28. (Amended) A method according to claim 25, further comprising:

a step of detecting, of plural pixel patterns formed on a predetermined coordinate

5 area including the coordinate data, at least one pixel pattern through which the accessing

unit is allowed to access the memory and store the pixel data of the desired primitive, and

13 outputting pixel pattern information indicating the detected at least one pixel pattern; and

said step of accessing comprising accessing the memory according to the pixel

pattern information, and comprising storing the pixel data generated by the pixel

10 generator into the memory in units of pixel data corresponding to the coordinate data.
